

THE
STRATEGIC VALUE OF INLAND
WATERWAYS

AN ADDRESS

DELIVERED AT THE

EIGHTH ANNUAL CONVENTION OF THE ATLANTIC DEEPER WATER-
WAYS ASSOCIATION, HELD AT SAVANNAH, GA.

NOVEMBER 9-12, 1915

By

HON. WILLARD SAULSBURY

U. S. SENATOR FROM DELAWARE



PRESENTED BY MR. OLIVER

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THE
STRATEGIC VALUE OF
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THE STRATEGIC VALUE OF INLAND WATERWAYS.

AN ADDRESS BY HON. WILLARD SAULSBURY,

United States Senator from Delaware,

AT THE EIGHTH ANNUAL CONVENTION OF THE ATLANTIC DEEPER WATERWAYS ASSOCIATION, HELD AT SAVANNAH, GA., NOVEMBER 9-12, 1915.

I am not going to consume the time of this association by proving once more the great, the uncontradicted, and the undeniable advantages to the Government and the people of the United States and the eastern seaboard of a deep sea-level canal between the Delaware and Chesapeake Bays. The commercial, naval, and military importance of this canal has been certified to and proven time and again.

Some of those who have examined and reported on the subject are Gen. Casey, Col. Craighill, Gen. Bixby, Col. Rossell, Maj. Raymond, Col. Black, Col. Flagler, Capt. Turtle, Gen. Humphreys, Benjamin H. Latrobe, Admiral Dewey, Gen. Macomb (present head of the War College), and Gen. Tasker H. Bliss (present Acting Chief of the General Staff).

A finer lot of men or abler engineers could not be found anywhere, and no business man would hesitate to accept their conclusions or to follow their advice.

Some of the things they have said in the numerous reports are these:

In 1886 Col. Craighill, of the United States Engineer Corps, reported:

No argument is necessary to show the great value in time of war with a maritime power of such an interior line of communication between the great Chesapeake and Delaware Bays and their tributary streams as this canal would be.

The Committee on Railways and Canals of the House in that year said:

Its entire feasibility has been definitely determined by three Government surveys ordered by Congress.

In 1894 the President, under authority given by Congress, appointed a board, among the members of which were Brig. Gen. Casey, Col. Craighill, and Admiral Dewey, then a captain in the Navy, and this board, having exhaustively considered the subject, reported:

The most feasible route * * * is substantially located upon the line of the existing Chesapeake & Delaware Canal. In the judgment of the board, this route will be best adapted for national defense and will give the best facility to commerce.

In another report appeared the following:

It will be doubted by no one that a deep-water connection between the two bays would be of vast importance in the contingency of war with a maritime nation.

It may be assumed that if a war with one of the great naval powers should arise, and the mere appropriation of the money could provide such a channel of communication between the bays, the amount would be at once provided without hesitation. That would, however, be too late.

In the latest report, not yet published, our military authorities declare this proposed deepened canal to be of the very greatest importance. I shall refer to that report hereafter.

I shall not weary you with the statistics in the multitude of favorable reports on this canal, but I am going to give you the latest official news on the subject and the result of my consideration of some matters in connection with it, which I have not spoken of in the Senate or any previous meeting on waterways.

Our country has awakened from the absolutely self-satisfied condition which produced the feeling that we can "lick the world." The big farmer boy has been forced into a front seat at the biggest and most brutal international prize fight in all history. He has learned that his 200 pounds and upward of weight and his great muscles, developed only for peaceful pursuits, can be beaten to a pulp in short order if either of the fighters jump the ropes and get after him. He can't get away from the prize fight, as he would like to do, and he sees the fighters scowling at him. If that big, awkward farmer's boy could get a small section of a hickory sapling to defend himself with when a fighter or his friends jump on him and try to grab his watch, he would be a foolish boy not to get the means of defense. [Applause.] Nobody wants to turn that good-natured, friendly farmer's boy into a prize fighter—we all want him to be just what he is, as nearly as he can—but prize fights are going on, and that boy can't get away from any brute of a pugilist who gets after him, and if the prize fighter gets him now he's certain to be licked.

Well, most of us have about determined to see that that good-natured boy is supplied with a good piece of fence rail, anyway, so he can swat anybody who jumps on him and have a chance of at least being let alone. I really wonder if our pacifist friends would refuse to hand that piece of fence rail to the boy. "Oh," they say, "he'll never need it." We all hope so, but let us exercise our brains. [Applause.]

Some time ago a member of the general staff of one of the great nations now at war, considering the possibility of successfully attacking this country, said that his nation was in a position to conquer the United States. He declared that there were many splendid landings on our eastern seaboard, where it was not possible to concentrate our troops, even if we had a sufficient number, in a relatively short time, and that it was feasible for an invading corps to conduct its operations at such points with the cooperation of their fleet. No naval war, he said, could be carried on successfully against the United State without at the same time inaugurating an action on land, and he believed it a certainty that a victorious assault could be made on the Atlantic coast, tying up the importing and exporting business of the whole country, bringing about such an annoying condition that

the Government would be willing to treat for peace. He doubted whether anything could be gained in occupying for any length of time so large a stretch of land as the United States, and said that one or two of our provinces, as he called them, might be occupied by invaders, and this alone would not move America to sue for peace. But, he continued, invaders would have to inflict real material damage by injuring the whole country through successful seizure of many of the cities of the Atlantic seaboard, in which the threads of the entire wealth of the country meet.

For enterprises of this sort, said he, small land forces would answer our purpose. In close conjunction with the fleet, these forces could quickly seize important and rich cities, interrupt supplies, disorganize governmental affairs, confiscate war and transport supplies, and, lastly, impose heavy indemnities.

We may assume that a man of sufficient capacity to be appointed a member of the general staff of one of the warring nations of Europe was not writing a professional military article on the possibility of a successful invasion of our country without careful technical consideration of the subject. Professional men are not willing to subscribe their names to articles dealing with professional matters unless they believe the statements and reasoning of the articles true and sound. This military writer was not dealing with the subject of an invasion of our country as a scare-head newspaper article might, but so far as his ability permitted outlined the chances for and against the success of a hostile expedition against us. He said our battle fleet has every prospect of victoriously defeating the forces of the United States * * *. After the defeat of the United States fleet the great extension of unprotected coast line and powerful resources of that country would compel them to make peace.

And dealing with the question of the possibility of such an expedition being determined on, he said with the United States, in particular, political friction, manifest in commercial aims, has not been lacking in recent years, and has, until now, been removed chiefly through acquiescence on our part. However, as this submission has its limits, the question arises as to what means we can develop to carry out our purpose with force, in order to combat the encroachment of the United States upon our interests.

It seems to me the statement of so eminent a military authority as a member of the general staff of a European nation draws us more closely than most of us have appreciated toward the vortex of the awful struggle in which practically the whole of Europe is involved. Articles of the character of that from which I have quoted show that no idle dreamer is arousing fears in our fellow countrymen when he urges reasonable preparedness for defense. No one who reads history can fail to understand that a great unprepared neutral nation, which has grown rich during the period of warfare among its neighbors, may not fold its arms and rely upon its conscious position of strict neutrality during preceding wars and congratulate itself that in no way can it be involved in strife.

This I believe to be a real danger. We will probably at the end of the European war be admittedly the richest nation in the world. Upon us a powerful victor in that struggle could levy unheard-of indemnities for alleged unfriendly acts during war, and we will at

the end of this war, by actually maintaining strict neutrality in accordance with the principles of international law, undoubtedly have incurred the dislike and possibly the hatred, speaking nationally, of foreign governments.

The claims of many of our people, their honest belief that the great nations of Europe will be so exhausted when this war is concluded that they will be unable to attack us, does not demand the unhesitating concurrence of my intelligence. The end of our own great Civil War, the War between the States, continued as it was for four years, exhausting our resources and impoverishing our people, found us in the strongest military condition we have ever been. A young, enthusiastic, and distinguished general at the end of that war unhesitatingly proposed to Gen. Grant in his enthusiasm, "Now, let us go North and take Canada." It required only that we should notify Louis Napoleon, then controlling the destinies of France, possibly at the height of his power, believed to be invincible in Europe, to compel him to abandon his dreams of empire in Mexico.

No one could deplore more than I that which my intelligence persuades me is necessary, namely, the consideration of increase of our national forces to enable us to defend our country against a foreign attack. No one will go further than I to bring about a state of lasting peace throughout the world, and particularly a state of peace so far as our country is concerned. I am opposed to establishing posts of offense far from the seacoast of our country, but I do regard it as essential that at the termination of this awful war in Europe our country shall be prepared to repel all naval attacks upon us or the invasion of our country.

We are yet unhappily in a position in the world, as shown by the awful calamity which has come upon the European nations, where some nation, thinking itself prepared for the struggle, will bring about international conflict, and try as we may to carry out our ideals of peaceful progress, we can not do this if other strong nations follow other ideals of government. Other nations, possibly all of those which have great naval or military power, regard our peaceful progress and prosperity as a condemnation of their method, and when the present unholy war terminates the victor in the struggle, unless all parties to it shall be utterly exhausted, would probably be able to invade our country and enforce its will upon us.

I believe it is most important that we shall continue to furnish the example of a peaceful, progressive nation to this warring world; that we, by our example, educate the people of other nations toward our ideals, and if we would do this, we can not submit to affront, attack, and possible conquest and thus have our Government and the great example we furnish utterly destroyed. [Applause.]

We can not rely upon our conscious rectitude of action and intention to protect us from the hatred of the belligerents or expect them to agree that we have maintained a position of disinterested friendship. My belief is when this great war ends, probably by insisting merely upon the rights of neutrals as recognized by international law, we have incurred the enmity of all and that this feeling of hostility will survive for a period of years. Then will come the time we must stand prepared to resist aggression, and the levy upon us of such huge indemnities as might impoverish our land.

Our relations to-day with the warring European nations are not very dissimilar, *mutatis mutandis*, to those of 100 years ago, when the Napoleonic wars ravaged the Continent and England was ruling the seas, as now.

We came almost openly to war with France and did have war with England.

Modern warfare and future wars will not be successfully conducted by attacking far outlying territory, the taking of which would not imperil the business and political life of the country attacked. Any successful assault upon our country, or one which would justify the effort in making it, would occur at some point where business, commercial, or political activities of this Nation could be so disorganized and upset that peace would be sought by us to avoid the tremendous losses involved by a continuation of hostilities; and the consideration of losses which might occur would be the determining factor as to what indemnity might be paid by us to relieve us from the effect of even a temporarily successful invasion.

Portions of the territory of any nation far removed from the nerve centers of its business, military, or political activities might be taken, occupation of such places might be continued for quite a long time, but eventually the nation, rallying to the defense of its territory, would be able to drive away invaders and rescue any portion of its territory which might be held. Attacks which might be made upon our country by a foreign foe in eastern New England or on our southern coast, where sparsely populated, would not affect our powers of resistance and our ultimate victory.

But if the great industries, spread so thickly over the territory and lying close to the Atlantic seaboard, from the east end of Long Island Sound to the Virginia Capes, could be paralyzed even temporarily, the tremendous embarrassment which would arise to us as a nation would be so felt that it might properly be considered how much we would pay to be relieved of this embarrassment. More millions of people are thickly congregated and more necessary manufacturing is carried on in the strip of country beginning with the east end of Long Island Sound and extending to Chesapeake Bay and the country immediately tributary thereto than any section of America.

The invasion and occupation of any portion of continental America by a foreign enemy would, of course, be only temporary, but the successful invasion of any part of this strip described would be much more disastrous than elsewhere.

The efficient military general staff officers of foreign Governments have studied the question of hostile operations against this country, as they probably have against all others, and I have shown the conclusions one of them has reached. Probably these conclusions are correct.

Assuming that they are, I believe that the points likely to be attacked may be reasonably located. We may assume that New York Harbor is reasonably well defended and that no enemy would attempt to make a base in a well-defended place (by either fleet or army) if an undefended base could be readily seized. Our fleet would probably be assembled in the vicinity of New York and would be able to defend vigorously any landing attempted from Narragansett Bay to

North River. Eastern New England would not, as we have seen, offer the rewards which would come in the way of indemnities which possibly a descent upon our shores at a point nearer the nerve centers of the country would produce.

The only undefended harbor within striking distance of New York on which a certain attack could be made and which would easily fall is located at the capes of Delaware (Lewes). Here an efficient base could be secured and its occupation would close the water transportation of Philadelphia and the other cities on the Delaware River and separate from the main fleet such war vessels as had been held in the Chesapeake. The Delaware capes are only 150 miles from New York. The country is very productive and the ordinary supplies of food available and which could be seized would be reasonably sufficient to sustain a large invading force without difficulty for an indefinite period. An important north and south rail line extends through the length of the peninsula from Wilmington to Cape Charles, Va., and an enemy invading this section could readily break this line, which is only about 30 miles distant by direct line from Lewes. Less than a hundred miles up the bay and river from Lewes are great shipyards, powder works, munition factories, oil pipe lines, steel manufacturing plants, and hundreds, possibly thousands, of machine shops, essential for the manufacture of offensive and defensive material and machinery in case of war.

The waterway is defended at one point only by batteries on the Delaware and New Jersey shores and a midstream fortification which might be effective, aided by mines in the channel, in stopping runbys of offensive vessels. These fortifications, however, could be taken in the rear by sufficient force, and a single hostile cruiser lying in the Delaware River at any point for 25 miles below Philadelphia could practically command and put out of use all direct north and south lines of railroad transportation now in existence.

Without claiming any technical military knowledge, I think reason shows that the point of attack which would be selected to most greatly embarrass this country has been pointed out. The Chief of our War College, the Chief of the General Staff of our Army, the Secretary of War, have all considered the possibility of this invasion and say "they find the undefended harbor at Lewes, Del., makes such a landing (of hostile invading force) a probability," and suggest what measures can be taken to make such landing ineffective and therefore improbable. By the defense of this vital portion of our seaboard assurances can be best given by the National Government that our national welfare shall not be threatened by any enemy we may have from overseas, and right here the activities of the Government may be best and most economically displayed in insuring our country against disaster in case of a foreign war.

It is really remarkable when one's mind gets to working on a concrete thing how things one has hardly considered at the time loom larger as possibly matters of real importance. In this territory I have described I have from time to time heard of strangers of other nationalities appearing, dwelling for a while, and disappearing in unusual and unexpected ways. A music master appears in a country community and drives from house to house over considerable area, giving lessons in music. He leaves there after a time.

No one knows why he left or where he went, and when next heard of he is a chemist employed in an important position in a large establishment. It becomes a fact firmly fixed in my mind, and I wonder how a highly educated chemist, able to earn a large salary, happens suddenly in a small community to be giving poorly paid music lessons. Can it be, one is bound to wonder, that the condition of the roads and watercourses, the terrain, as military men scientifically call it, interested this highly trained scientific man as he drove about the country giving his music lessons? I know, however, that one swallow does not make the summer, and almost dismiss the music teacher from my mind when another person of the same nationality is reported in the same district, living comfortably on a farm producing practically nothing because of his lack of agricultural knowledge; and the farmer likes to drive around and stops everywhere to fish or talk when crops should be getting in. Two swallows may not even make the summer, but two swallows are better than one in making us believe that the summer may be almost here. [Applause.]

I'm afraid some of my friends who are willing to let the farmer's boy try to lick the professional prize fighters will say that I am "seeing things." Well, I am, but not in the way they would imply.

I've been seeing and talking good things about this canal for some years now, and there are some new things I have seen lately I'm going to talk about now.

When the river and harbor bill of 1913 came over from the House it had in it an absolutely inadequate provision for this great work. By properly representing the matter to the Commerce Committee of the Senate, convincing them of the great value it would be to the commerce of the country, I succeeded in getting a provision inserted in the bill providing for the acquisition by the Government of this canal. You all know what happened. The continuous filibuster conducted by a few Senators, making antipork-barrel reputations, who had exhausted all sensible argument, so tired out the Members of Congress, which had already set during the summer heat and winter snows, as to cause the abandonment of that appropriation bill for the year, and in lieu thereof the appropriation of a lump sum to continue only necessary work then under way by the War Department.

Practically the same thing occurred at the next session of Congress, which adjourned on the 4th of last March, except that I got into that bill, before it was talked to death, a provision requiring the Secretary of War to condemn this canal for Government use and appropriating a sufficient amount of money to carry on the proceedings. Even that was killed by a renewal of the filibustering tactics, the delays, and aggravations which occurred from the same Senators who opposed en bloc works of great necessity as well possibly as some that were not so meritorious.

What I said about them for publication was that if our country should ever be attacked, and because of the failure to provide for the passage of its vessels between these two great bays we should suffer a naval disaster due to our inability to concentrate our fleet, those who prevented the building by the Government of a proper canal between the Delaware and Chesapeake Bays would be as earnest in

disavowing their responsibility for their unpatriotic efforts as the European nations are now in endeavoring to escape responsibility for bringing on the present war.

Well, these men again succeeded in beating the canal for the time being. Knowing no intelligent criticism could be made to the proposition to buy this canal, when I found it impossible in the last Congress to start this great project by an appropriation, feeling absolutely assured that no qualified engineer would make an unfavorable report on the project, I prevailed upon the Senate to pass a resolution calling upon the Secretary of War for the opinions of competent engineers as to the advantages or disadvantages, commercial, naval, or military, of the acquisition by the Government of this canal. I pinned my faith on the report that these officers would make. I believed that no intelligent man with military knowledge would make a report which would not favor the project I was advocating. My confidence has been justified, for there is now lying in the office of the Vice President of the United States the report of the Secretary of War, made pursuant to the resolution which the Senate adopted, and I am going to tell you to some extent what it is.

This report has not yet been published, but it is a public document. This report when the Senate meets will be laid before it for consideration. This report will be in the hands of the Senate committees when they are considering what expenditures shall be made for the defense of this country and the promotion of its commerce, and in this report the highest military authorities, charged with the duty of advising on measures to be taken for the defense of this country, declare that such canal will be of very great military importance and constitute an important part of our coast-defense system.

They go into details regarding the concentration of naval forces to resist invasion and of the great advantage an improved canal would be here as an obstacle in preventing a land attack through this section on Wilmington and Philadelphia. They believe that a hostile expedition would probably be landed at the fine, undefended harbor at Lewes, Del., and that a sea-level canal along the line of this canal would be of very great military importance for the movement of craft which constitute an important part of our coast-defense system, and would also form an almost impassable obstacle to the passage of troops advancing to attack Wilmington or Philadelphia, and, moreover, would be of great use in transporting men and material for the Coast Artillery to both the bays.

This enlarged canal they say is a necessity for the larger project of one connecting the Delaware with New York Bay across New Jersey, a distance of 34 miles, and that a canal through the whole distance would make the landing of hostile troops almost impossible between Narragansett and Chesapeake Bays.

Has my confidence in this project been justified or not, and can you attribute lack of interest in this great project, when these facts are generally known, to anything but unpatriotic motives?

I am greatly gratified at the result which has been produced by this resolution. I believe the report of the Secretary of War, who, with the Chief of the General Staff, concurs in this report prepared by the Chief of the War College, will cause this great project to be taken up. The effect of the completion of this great work extends so

far and is so vast that I hesitate to further elaborate on it for fear I might seem too enthusiastic as to results.

It is the duty of the Federal Government to defend our shores. We are warned by foreign writers that successful attacks might be made upon us. The places that might be attacked are in some measure indicated. Our own military authorities concur and specifically state that an oversea attack would probably be made in Delaware on the fine and absolutely undefended harbor at Lewes.

How may we, interfering as little as possible with the usual industrious and orderly lives our people lead, taking as little as possible from the common funds, to which we all contribute, for unproductive works—only so much as is necessary to insure the successful defense of our country—make easier the successful defense of our country in case we are attacked? We have no mean Navy now, and I am glad to know, or at least feel assured, that we are to have a better and stronger one. If our present Navy, or the better and stronger Navy we intend to have, can be concentrated readily at any point from Narragansett Bay to the Virginia capes, if we can readily move troops and munitions of war for the defense of this section of our Atlantic seaboard, if we can surely protect the great industries of the country in this section, we are multiplying many times the efficiency of our national forces; and if we may do this, at the same time enlarging our commercial facilities and cheapening transportation of the ordinary commodities in use by all our people, it seems to me no better line toward national preparedness can be followed. [Applause.]

It is a maxim of our naval and military experts that the power of a fleet increases in proportion to the square of its units. That is to say, if we had five warships of given power involved in a naval action at the mouth of the Delaware Bay, the chances of success would be dependent upon these five ships alone. If a naval action at the Capes of the Delaware was expected and five ships of equal power and efficiency could be joined to those there present and engage in the same action, the combined force would not be relatively twice as strong as the original fleet, but the juncture of the two squadrons would raise the relative efficiency and probabilities of success in such naval action to the equivalent of four times the power of the original fleet, joined only by an equal number of vessels.

Extend that possibility along the vital stretch of our Atlantic seaboard for hundreds of miles and see what advantages protected means of quick communication would afford. We will probably always have some ships in the Delaware Bay and always in Chesapeake Bay. We will always have some in New York Harbor and Long Island Sound; and yet an enemy invading force by occupying the fine harbor at the mouth of our Delaware Bay could defeat the forces in the Delaware, could defeat the forces in Chesapeake Bay trying to join the fleet at New York, and if superior in power and efficiency to the fleet in New York Harbor and Long Island Sound, could defeat it, seeking to relieve a blockade of the cities upon the Delaware or those lying upon the Chesapeake when it would have no reasonable chance of success against the combined fleet.

To illustrate this by simple figures, let us suppose we had in the Delaware Bay and River 5 units of naval force—it does not matter what they may be called, dreadnaughts, torpedo boats, or cruisers.

In the Chesapeake Bay or inside the Capes of Virginia, say we had 10 of such units, and in New York Harbor and vicinity 15 of such units. By a sudden descent on our coast at Lewes a lodgment might be effected and a hostile naval force of 20 units find a satisfactory base for offensive operation. The ships in the Delaware would be so greatly overpowered in the proportion of 400 to 25 that no action could be attempted. The ships in the Chesapeake attempting to join the New York fleet could be met by the enemy, having an advantage of 400 to 100. The New York fleet of 15 units would be at impossible disadvantage in the proportion of 225 to 400 in any naval action, but if the ships—fighting units of our Navy—could be concentrated anywhere, and could together meet the enemy, our force would have an advantage in the proportion of 900 to 400, practically insuring the success of our operations. For the cost of one great battleship all our forces in the Delaware and Chesapeake Bays could be combined. For the cost of four great battleships all our naval forces from Narragansett Bay to the Virginia Capes could be combined, and if we assume such a naval action should occur at the place I have indicated our chances of success with four less battleships than the 30 over the force of the 20 battleships lying at the Capes of the Delaware would be represented by 676 to 400, and the money expended in enabling this concentration to be made would save in the commerce of this country each year about 10 per cent on the investment of the people and be as useful in peaceable times as it would in time of war.

The question I am putting to my colleagues in the Senate, the question I am putting to the departments of this Government, the question I put to you to-day is, Is not this the way to defend our country? By defense works of commercial usefulness in time of peace, works that will pay to the people of this country a dividend of not less than 10 per cent upon their cost each year and be monuments to the peaceful progress of our people as well as to their far-sightedness for military and naval efficiency, works that will last while our Government endures and not become obsolete and useless, comparatively speaking, in a decade or less.

The strategic value of sufficient canals anywhere is everywhere attested, and is now being absolutely proved by the European war. Certainly the value and usefulness of the Suez Canal to the allies and of the Kiel Canal to Germany is so well known to all of us that any statement about them here would be superfluous. The great strategic value to our country of the Panama Canal has been so often discussed and is so well understood as to be a matter of common knowledge.

But considering the situation as I have described it in that portion of the Atlantic seaboard from which I come, let me consume the short time that remains to me in describing what conditions are there. Only twice in our history has a foreign enemy invaded this country, and both times our State suffered invasion of its territory. The English armies invaded the northern section of our State in the time of the Revolution, and English ships attacked our Delaware seacoast in the War of 1812. It is more than probable that in case we should be drawn into war with any powerful nation of Europe right there we offer the most vulnerable point of attack.

History is said to repeat itself, and it does so just because human beings, human interests, the possibilities of human endeavor and exertion when considered in connection with the configuration of the earth's surface and the facts and forces of nature change so little in hundreds or thousands of years.

What I am advocating is changing just a little, a very little portion of the earth's surface, so that the forces of man and his activities may be greatly more effective in achieving most important results.

Those who come to a meeting of this Atlantic Deeper Waterways Association I fancy do so because of an interest they feel in the progress of the work which it favors. They have become convinced in one way or another that the improvements in waterways advocated by this association will be for the general benefit of the country, of those who live upon the Atlantic seaboard, or of those who dwell in particular communities along that seaboard.

Appropriations made by the General Government for the specific purposes advocated by this association can only be secured when the Senators and Members of Congress gathered together from all over the United States have been convinced that the appropriations made in the bill are justified in the general interest.

Let me suggest that there is no argument, no presentation of any case requiring an appropriation from Congress, which can be so forcibly presented that it will equal in its conclusive force an actual demonstration of the great value which an executed project has been to the people of the country in increasing its commerce, of lessening the rates of water and rail transportation, and of the utility of the completed work as an aid to the general defense of the country.

The actual results from a completed proposition produce conviction and preclude debate. You may talk to Senators and Members of Congress, you can attempt to show them why a result will necessarily follow the completion of a project, you may present arguments to them which are undeniable and incapable of refutation, but no argument you can present, no effort you may make, is equal to the cold facts and figures that can be produced after a project is completed, showing the exact results due to a completed work and its effect.

Go all over these United States, consider where it is possible at the smallest expense to demonstrate the value of deeper waterways, and I challenge you to find such a condition as that which exists at the upper end of the Delaware, Maryland, and Virginia Peninsula. The two greatest commerce-bearing estuaries on the Atlantic seaboard are separated by a narrow neck of land of less than 14 miles.

It is pierced now by an antiquated canal allowing the slow passage of boats drawing only 9 feet of water, of not more than 24 feet beam, and not more than 223 feet in length. This canal, completed in 1829, bears about the same relation to modern transportation as the old stagecoach of that time, jogging over rough roads, bears to the modern express train of our great railroad systems.

Less than 14 miles separate fifty millions of tons of commerce annually on the Chesapeake from fifty millions of tons annually on the Delaware. It prevents the passage in time of possible need of any efficient vessel of war—even tugs, torpedo boats, and submarines—from reenforcing vessels in the other.

A multitude of official reports have advocated that the Government shall remedy this great defect. Time and again it has been certified by the highest experts in our Government service that the action we advocate will save in times of peace to the ordinary commerce of the country something like 18 to 20 per cent on the cost of its acquisition and construction.

Is there anywhere else in this land of ours where such an opportunity exists to demonstrate and render certain the claims of this association of the great benefits of water transportation? And I ask you now whether you can better support the efforts you make, the claims you put forward, the principles which you advocate, than by beginning here a work of comparatively small magnitude, of comparatively trifling expense, by binding together for the benefit of our people these two great waters lastingly to benefit the people of this whole country hereafter as long as time endures? [Applause.]

